

Title (en)
HYDRAULIC CLOSING UNIT

Title (de)
HYDRAULISCHE SCHLIESSEINHEIT

Title (fr)
UNITE HYDRAULIQUE DE FERMETURE

Publication
EP 0833736 A1 19980408 (DE)

Application
EP 96920812 A 19960610

Priority
• EP 9602508 W 19960610
• LU 88624 A 19950612

Abstract (en)
[origin: WO9641712A1] A hydraulic closing unit has a ring-shaped hydraulic cylinder (26) that generates a closing force, a locking bushing (34), an assisted drive (37) for swivelling the locking bushing (34) from a first angular position to a second angular position, and a pressure bar (22) that extends through the hydraulic cylinder (26) and the locking bushing (34) in the axial direction. Outer teeth (40) on the pressure bar (22) and inner teeth (46) in the locking bushing (34) allow the pressure bar (22) to be axially pushed through the locking bushing (34) in the first angular position of the locking bushing (34), and an axial force to be transmitted in the second angular position of the locking bushing (34). The hydraulic cylinder (26) is designed as a double action, ring-shaped compression cylinder. The piston (28) of the hydraulic cylinder (26) is secured against rotation and screwed by means of a rotary thread (36) into the rotary locking bushing (34).

IPC 1-7
B29C 45/67

IPC 8 full level
B22D 17/26 (2006.01); **B29C 33/24** (2006.01); **B29C 45/67** (2006.01)

CPC (source: EP US)
B29C 45/6714 (2013.01 - EP US)

Citation (search report)
See references of WO 9641712A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9641712 A1 19961227; AT E204804 T1 20010915; CA 2230724 A1 19961227; CA 2230724 C 20040921; DE 59607592 D1 20011004; EP 0833736 A1 19980408; EP 0833736 B1 20010829; ES 2160822 T3 20011116; JP 3952213 B2 20070801; JP H11507603 A 19990706; LU 88624 A1 19970103; PT 833736 E 20020228; US 6200123 B1 20010313

DOCDB simple family (application)
EP 9602508 W 19960610; AT 96920812 T 19960610; CA 2230724 A 19960610; DE 59607592 T 19960610; EP 96920812 A 19960610; ES 96920812 T 19960610; JP 50261597 A 19960610; LU 88624 A 19950612; PT 96920812 T 19960610; US 98154398 A 19980427